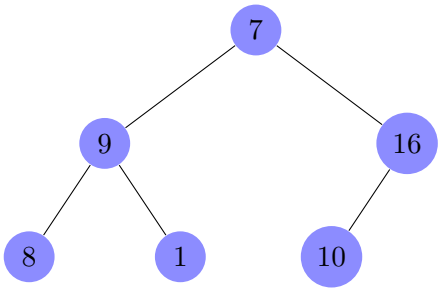
Slide 6:

First array:



Second array: Has an item in offset 0! Not an array tree.

Third array: The 6 in index 2 has only one child, 15, in index 5. This is not left-most. More importantly, the 0 in index 6 has no parent in index 3.

Fourth array:

Slide 7:

0	1	2	3	4	5	6	7	8	9	10
-	2	9	6	6	21	30	5	14	67	22

Slide 8:

No, this tree cannot be represented as an array tree, because the nodes in the bottom level are not as far to the left as possible. This is what the array would be like...

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
-	2	6	9	30	5	6	21	-	-	-	-	14	67	22	-

... But it will never occur if items are added in order.

Slide 9:

Top left:

0	1	2	3
-	2	30	5

Top right:

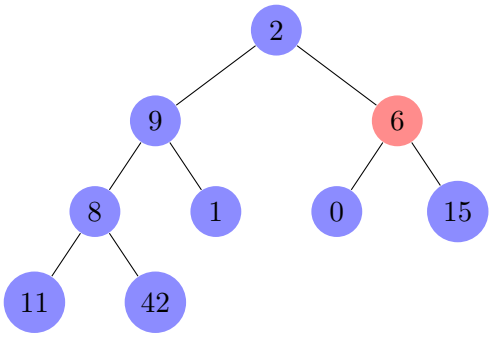
0	1
-	15

The bottom tree cannot be represented by an array, because the nodes in the bottom row are not in the leftmost positions.

Slide 13:

If we delete...

0	1	2	3	4	5	6	7	8	9
-	2	9	6	8	1	0	15	11	42



Then it becomes...

0	1	2	3	4	5	6	7	8	9
-	2	9	42	8	1	0	15	11	-